

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A process of producing man-made vitreous fibres having a phosphorus content of at least 0.5%, measured as weight % P₂O₅, comprising providing a charge of mineral material which includes briquettes, melting the charge in a shaft furnace to provide a melt and fiberising the said melt to form fibres,
wherein the briquettes comprise a non-virgin rock material comprising at least 2% phosphorus, the non-virgin rock material being selected from the group consisting of sewage sludge ash, bone meal ash, granulated sewage sludge slag and mixtures thereof, and wherein the sewage sludge ash content in the briquettes is not more than 20%.

2. (Previously Presented) The process according to claim 1 in which the non-virgin rock material comprises at least 3% phosphorus.

3. (Previously Presented) The process according to claim 2 in which the non-virgin rock material comprises at least 5% phosphorus.

4. (Previously Presented) The process according to claim 1 in which the non-virgin rock material comprises sewage sludge ash.

5. (Previously Presented) The process according to claim 1 in which the non-virgin rock material comprises granulated sewage sludge slag.

6. (Currently Amended) The process according to claim 1 in which the briquettes comprise at least 3% by weight and not more than 25% by weight of the non-virgin rock material.

7. (Currently Amended) The process according to claim 1 in which the briquettes comprise at least 4% by weight and not more than 15% by weight of the non-virgin rock material.

8. (Previously Presented) The process according to claim 1 in which the non-virgin rock material is granulated sewage sludge slag and the briquettes comprise not more than 50 wt.% granulated sewage sludge slag.

9. (Previously presented) The process according to claim 1 in which the non-virgin rock material is sewage sludge ash and the charge of mineral material contains from 1 to 15% sewage sludge ash, by weight of charge.

10. (Previously presented) The process according to claim 1 in which the briquettes additionally comprise waste mineral wool.

11. (Previously Presented) The process according to claim 1 in which the briquettes are produced at least two days prior to their inclusion in the charge.

12. (Currently Amended) The process according to claim 1 in which the fibres comprise less than 22% aluminium, measured as weight % Al_2O_3 and from 0.5 to 10% phosphorus, ~~preferably less than 5% phosphorus~~, measured as weight % P_2O_5 .

13. (Previously presented) The process according to claim 1 in which the fibres comprise at least 1% to less than 5% phosphorus, measured as weight % P_2O_5 .

14. (Canceled)

15. (Previously presented) The process according to claim 1 in which at least 90% of the phosphorus in the charge is transferred into the melt and the fibres.

16. (Canceled)

17. (Currently amended) The process according to claim [[16]] 1 in which iron is tapped from the furnace.

18. (Previously presented) The process according to claim 1 in which the fibres comprise an aluminium content, measured as weight percent Al_2O_3 , of less than 4%.

19. (Currently amended) A process of producing man-made vitreous fibres comprising providing a charge of mineral material which includes briquettes, melting the charge in a shaft furnace to provide a melt and fiberising the melt to form fibres, wherein the briquettes comprise sewage sludge ash in [[an]] a positive amount of not more than 20% of the briquettes.

20 - 21. (Canceled)

22. (Previously presented) The process according to claim 1 further comprising forming fibres into a product which is an insulation product, growth substrate or a granulated filler.

23. (Canceled)

24. (Currently amended) The process according to claim 1 in which the briquettes comprise at least 5% by weight and not more than 10% by weight of the non-virgin rock material.

25. (Previously presented) The process according to claim 1 in which at least 92% of the phosphorus in the charge is transferred into the melt and the fibres.

26. (Previously presented) The process according to claim 1 in which at least 95% of the phosphorus in the charge is transferred into the melt and the fibres.

27. (Currently amended) The process according to claim [[16]] 1 in which the shaft furnace is a cupola furnace.

28. (New) The process according to claim 27 in which the briquettes comprise at least 4% by weight and not more than 15% by weight of the non-virgin rock material, and in which at least 92% of the phosphorus in the charge is transferred into the melt and the fibres.